Claims

1. Fuel injection valve comprising:
- a nozzle body having a nozzle body seat, and
- a nozzle needle tightly guided in the nozzle body and incorporating a nozzle needle shaft and a nozzle needle seat,
- wherein the nozzle body seat and the nozzle needle seat together forming a sealed seat,
- wherein a gap is provided axially in height between the sealed seat and the nozzle needle shaft, and wherein an outer surface of the nozzle needle runs essentially parallel to an inner surface of the nozzle body in the region of the gap.

2. Fuel injection valve according to Claim 1, wherein the gap is implemented as an elongated recess in the nozzle needle and/or the nozzle body.

3. Fuel injection valve according to Claim 1, wherein the gap adjoins a sealing edge of the nozzle needle seat.

4. Fuel injection valve according to Claim 1, wherein the sealing edge is provided on a circumferential cylindrical needle section between a nozzle needle tip and a frusto-conical body section of the nozzle needle.

5. Fuel injection valve according to Claim 4, wherein the outer surfaces of the conical nozzle needle tip and of the frusto-conical body section of the nozzle needle each have essentially the same included angle.

6. Fuel injection valve comprising:
- a nozzle body having a nozzle body seat,
- a nozzle needle tightly guided in the nozzle body and incorporating a nozzle needle shaft and a nozzle needle seat,
- a sealed seat formed by the nozzle body seat and the nozzle needle seat,
- a gap axially in height between the sealed seat and the nozzle needle shaft, and
- an outer surface of the nozzle needle running essentially parallel to an inner surface of the nozzle body in the region of the gap.

7. Fuel injection valve according to Claim 6, wherein the gap is implemented as an elongated recess in the nozzle needle and/or the nozzle body.

8. Fuel injection valve according to Claim 6, wherein the gap adjoins a sealing edge of the nozzle needle seat.

9. Fuel injection valve according to Claim 6, wherein the sealing edge is provided on a circumferential cylindrical needle section between a nozzle needle tip and a frusto-conical body section of the nozzle needle.

10. Fuel injection valve according to Claim 9, wherein the outer surfaces of the conical nozzle needle tip and of the frusto-conical body section of the nozzle needle each have essentially the same included angle.